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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/816,070

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Katsuhiko Torii

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23400

7590

10/08/2002

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EXAMINER

LE, DANG D

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 10/08/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/816,070

Applicant(s)

TORII ET AL.

Examiner

Dang D Le

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 August 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments with respect to claims 1-4 and 6-11 have been considered but are moot in view of the new ground(s) of rejection.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
4. Claims 1, 2, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walther et al. in view of Hauser et al.

Regarding claim 1, Walther et al. show a geared motor (Figures 1-8) comprising:

- A yoke (Figure 2) having an opening and receiving a motor unit (1);

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- A gear housing (3) made of a resin material (plastic), said gear housing covering said opening of said yoke and receiving a worm gear assembly (6, 7) for transmitting a rotational force of said motor unit to an output shaft (210) connected to said worm gear assembly (Figure 11), said worm gear assembly including a worm wheel (6), said gear housing having a wheel housing segment (at 7 and around 7) that receives and rotatably supports said worm wheel, said wheel housing segment having a base wall (right portion in Figure 2 including areas near 6, 26, 55, 3, 11, and 17), said output shaft being connected to said worm wheel and being rotatably received in said base wall of said wheel housing segment such that an axial direction of said output shaft is generally perpendicular to a plane of said base wall of said wheel housing segment (Figure 2); and
- A plurality of ribs (54, Figure 5) extending over at least part of an outer surface of said base wall of said wheel housing segment, each one of said plurality of ribs having a lateral thickness (Figure 5) that is measured in a direction perpendicular to said axial direction of said output shaft and that is equal to (if compared with portion near 6) or smaller (if compared with portion surrounding shaft 210 and portion receiving screw 99a) than an axial thickness of said base wall of said wheel housing segment measured in said axial direction of said output shaft, wherein:
  - Said worm gear assembly further includes a worm (6);

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- Said gear housing has a worm housing segment (50) that rotatably receives said worm; and

Walther et al. do not show at least two of said plurality of ribs continuously extending to the worm-housing segment beyond said base wall of said wheel housing segment.

Hauser et al. show at least two of said plurality of ribs (104) continuously extending to the worm-housing segment beyond said base wall of said wheel housing segment for the purpose of strengthening the housing structure.

Since Walther et al. and Hauser et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to extend at least two of said plurality of ribs continuously to the worm housing segment beyond said base wall of said wheel housing segment as taught by Hauser et al. for the purpose discussed above.

Regarding claim 2, it is noted that Walther et al. also show said wheel housing segment further includes a peripheral wall (52) that generally extends from an outer peripheral edge of said base wall of said wheel housing segment in said axial direction of said output shaft; and said each one of said plurality of ribs further extends over at least part of an outer peripheral surface of said peripheral wall of said wheel housing segment.

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Regarding claim 9, it is noted that Hauser et al. also show the two of said plurality of ribs extending substantially to an imaginary plane, the imaginary plane extending through a rotational of the worm and being parallel with a rotational axis of the worm wheel.

Regarding claim 10, this claim is similar to claim 1 which is rejected.

5. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walther et al. in view of Hauser et al. as applied to claim 1 above, and further in view of Evans.

Regarding claim 3, the motor of Walther et al. modified by Hauser et al. shows all of the limitations of the claimed invention with said wheel housing segment further includes a shaft supporting portion for rotatably supporting said output shaft (Figure 11, portion above and below 200). Walther et al. do not show said shaft supporting portion being located generally at a center of said base wall of said wheel housing segment; and said each one of said plurality of ribs extending radially outwardly from said shaft supporting portion.

Evans shows said shaft supporting portion (64) being located generally at a center of said base wall of said wheel housing segment; and said each one of said plurality of ribs (76) extending radially outwardly from said shaft supporting portion for the purpose of making a motor vehicle window lift drive.

Since Walther et al., Hauser et al. and Evans are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

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It would have been obvious at the time the invention was made to a person having ordinary skill in the art to locate the shaft supporting portion generally at a center of said base wall of said wheel housing segment; and to extend said each one of said plurality of ribs radially outwardly from said shaft supporting portion as taught by Evans for the purpose discussed above.

Regarding claim 4, it is noted that Evans also shows said each one of said plurality of ribs having an axial thickness that is measured in said axial direction of said output shaft and that decreasing from said shaft supporting portion toward said outer peripheral edge of said base wall of said wheel housing segment (Figure 5).

6. Claims 6-8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walther et al. in view of Hauser et al. as respectively applied to claims 1 and 10 above, and further in view of Porter et al.

Regarding claims 8 and 11, the motor of Walther et al. modified by Hauser et al. shows all of the limitations of the claimed invention except for a circumferential rib that extends about said output shaft in a circumferential direction in said outer surface of said base wall of said wheel housing segment, said circumferential rib having a radial thickness that is measured in a radial direction of said base wall of said wheel housing segment and that is equal to or smaller than said axial thickness of said base wall of said wheel housing segment.

Porter et al. show a circumferential rib (30, Figure 3) that extends about said output shaft in a circumferential direction in said outer surface of said base wall of said wheel housing segment, said circumferential rib having a radial thickness that is

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measured in a radial direction of said base wall of said wheel housing segment and that is equal to or smaller than said axial thickness (near 30, Figure 4) of said base wall of said wheel housing segment for the purpose of increasing mechanical strength.

Since Walther et al., Hauser et al. and Porter et al. are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to include a circumferential rib that extends about said output shaft in a circumferential direction in said outer surface of said base wall of said wheel housing segment, said circumferential rib having a radial thickness that is measured in a radial direction of said base wall of said wheel housing segment and that is equal to or smaller than said axial thickness of said base wall of said wheel housing segment as taught by Porter et al. for the purpose discussed above.

Regarding claim 6, it is noted that Porter et al. also show said plurality of ribs (28) being arranged at substantially equal intervals.

Regarding claim 7, it is noted that Porter et al. also show said plurality of ribs (28) being circumferentially arranged at substantially equal angular intervals.

### **Conclusion**

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).



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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Information on How to Contact USPTO***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dang D Le whose telephone number is (703) 305-0156. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

DDL  
October 4, 2002

*DL*

*Dang D Le*